Transforming Students' Global Knowledge and Perspectives through International Service- Learning (ISL): How U.S. University Agriculture Students Made Sense of their *Lived Experiences* Over Time

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Abstract

University agriculture students are failing in terms of their general global knowledge. As such, the need exists to examine instructional techniques that may assist in overcoming this deficiency. One such approach is international service-learning (ISL). The purpose of the current study, therefore, was to explore the lived experiences of university agriculture students who participated in an ISL opportunity to Uganda, which was partially funded by a grant from the U.S. Department of State. The essence of participants' lived experiences is best described as a transformative shift in their global knowledge and perspectives. The processes that foregrounded this shift are described through six themes of meaning: (a) contextual border crossing; (b) dissonance; (c) personalizing; (d) processing; (e) connecting; and (f) sustained relationships. Findings suggest students' perspectives could be modified through ISL. Using Kiely's (2005) transformative learning model for service-learning (TLMSL), recommendations are offered for research, theory-building, and practice.

Keywords: global perspectives; international service-learning; Uganda; U.S. university students

Introduction

As the global population escalates, food insecurity remains a primary concern in many developing countries (United Nations News Centre, 2013). Nowhere is the problem more acute than in Sub-Saharan Africa (SSA) (Halweil & Nierenberg, 2011). The U.S. Department of State intervened to improve food security in SSA by funding a Food Security Fellows (FSFs) project in Kenya and Uganda, as proposed by Oklahoma State University (OSU) faculty. The project sought to reduce food insecurity through an initiative aimed at improving communication and collaboration among media professionals, community leaders, and policymakers (George et al., 2014). This study focused on an international service-learning (ISL) component embedded within the larger project enabling students to participate. The students – undergraduate and graduate – were aspiring agricultural educators and communicators. They were expected to contribute to the project's objectives by sharing their knowledge and experiences of U.S. agriculture, especially in regard to teaching youth and recruiting them as human capital for the agriculture sector.

ISL infuses the core principles of service-learning into international settings (Ash & Clayton, 2004). Bringle and Hatcher (2011) explained:

> Students do more than study in another nation; they are also engaged in organized service activities that (a) complement and augment their classroom learning, (b) contribute to the community in the host country, (c) support face-to-face interaction with others, (d) increase cross-cultural understanding of others, and (e) challenge students to clarify and reconsider their role as a citizen. (p. 11)

The literature demonstrates that ISL may enrich both undergraduate and graduate agriculture students' international learning experiences (Bunch, Stephens, & Hart, 2011; Huerta & Morris, 2006). As such, ISL is now positioned as an emerging trend in U.S. universities offering degrees in agriculture (Black, Moore, Wingenbach, & Rutherford, 2013; Russell & Morris, 2008).

Review of Literature

As an instructional method, ISL surfaced in U.S. universities in the 1990s when faculty recognized shifting world trends called for graduates to be more globally aware (Bringle & Hatcher, 2011). With ISL's ascent, empirical evidence suggests it may improve students' cognitive retention, interest in the curriculum, and global mindedness (Ash & Clayton, 2004). ISL may also hold implications for enhancing a student's commitment to *social justice* (Cipolle, 2010). For instance, this method of instruction has the potential to recast abstract discussions into debates concerning tangible, real-world problems (Cipolle, 2010). Questions such as, '"*Why are people poor?'* and '*Why is the world full of injustice?*'" can initiate a cycle of critical assessment by students (Grusky, 2000, p. 859). These questions may lead to deeper inquiries into topics and also enhance students' critical thinking skills (Grusky, 2000).

More recent, Cunningham (2015) articulated how transformational learning experiences through ISL may catalyze students' understanding of intercultural competence and commitment to social justice. Transformational learning occurs through ISL experiences as students gain insight into global issues that stand in opposition to their previously held beliefs (Kiely, 2005). This insight often emboldens them to develop a new, more complete

perspective on international issues (Kiely, 2005). Moreover, students may be more motivated through ISL experiences to become part of the *solution* rather than a *contributor* to global problems (Neihaus & Crain, 2013). For example, students participating in ISL experiences have reported increased levels of satisfaction during the learning process because they were enabled to develop ideas that assisted their host countries in overcoming one or more issues or challenges (Neihaus & Crain, 2013).

ISL is also well suited for agricultural contexts. Crabtree (2008) explained that local agricultural problems often develop into global issues. As a result, large-scale efforts requiring the involvement of numerous stakeholder groups, including young people, are likely needed to create sustainable solutions. Therefore, strategies such as ISL are imperative to help forge the collaborative relationships needed to make lasting impacts (Crabtree, 2008). For instance, through ISL, participants often perceive their service-based contributions are small. However, Pless, Maak, and Stahl (2006) argued that small acts may inspire *ripples of change* throughout complex social systems. Therefore, teamwork amongst all actors, especially students, is vital to overcoming many of the global barriers facing international development (Crabtree, 2008).

Although the benefits and utility of ISL are encouraging, Moriba and Edwards (2015) found that agriculture students were failing in terms of general global knowledge. A need is present, therefore, to examine instructional techniques that may assist in overcoming this deficiency. As a result, investigating university agriculture students' *lived experiences* through an ISL opportunity emerged as a critical line of inquiry.

Emergent Theoretical Framework

Through analysis of the study's data, Kiely's (2005) transformative learning model for service-learning (TLMSL) arose as the most appropriate lens to theoretically explore, compare, and contrast students' lived ISL experiences. TLMSL builds on Mezirow's (2000) transformational learning theory (TLT). TLT proposes that learning involves an intense process in which students' perspectives are altered. In TLT, Mezirow (2000) stressed critical reflection as a key element; however, Kiely (2005) maintained reflection is only one element of the process. Therefore, TLMSL provides "a much more holistic set of transformational learning processes unique to service learning" (Kiely, 2005, p. 14). In this way, Kiely (2005) posited that perspective transformation through ISL occurs in five major stages: (a) contextual border crossing; (b) dissonance; (c) personalizing; (d) processing; and (e) connecting.

Contextual border crossing refers to the personal, structural, historical, and programmatic factors that intersect to frame students' ISL experiences (Kiely, 2005). On the other hand, *dissonance* occurs when a dichotomy exists between students' prior views and contextual factors framing their experience (Kiely, 2005). As students learn to cope with dissonance, they enter the *personalizing* stage (Kiely, 2005). Then, through *individual* and *social reflections* on their shifting views, students begin to process what they experienced (Kiely, 2005). The final stage, *connecting*, occurs when students integrate new perspectives in their daily lives through formal interactions with others at home (Kiely, 2005). It was through this *a posteriori* theoretical lens that we analyzed and interpreted the study's data.

Philosophical Perspective, Purpose, and Guiding Research Question

In the initial design phases, we chose to position this study in Koro-Ljungberg's, Yendol-Hoppy's, Smith's, and Hayes' (2009) line of thinking. Therefore, we stressed the "instantiation of methods" (Koro-Ljungberg et al., 2009, p. 687) as our guide through value-laden decision junctures. As a result, we employed the *constructionism* perspective to ground this study. Crotty (1998) defined constructionism as knowledge that is ". . . contingent upon human practices, being constructed in and out of interaction between human beings and the world, and developed and transmitted within an essentially social context" (p. 42). From this worldview, we developed the study's purpose, which was to explore the *lived experiences* of university agriculture students who participated in an ISL experience. However, before pursuing the layers of meaning hidden in each student's lived experience we chose to foreground our *conceptual moves* through the construction of a guiding research question: *How did U.S. university agriculture students make sense of their ISL experiences over time?* Next, we provide insight into the study's background, which presaged its conceptualization.

Background of the Study

This study is the result of a grant-funded project that promoted capacity building exchanges in regard to food security between FSFs and U.S. participants (George et al., 2014). By design, the project implementers facilitated its activities through four distinct phases. First, 12 FSFs received professional development training at OSU through a series of food security themes in Spring of 2011. Next, OSU faculty, students, and collaborators traveled to Kenya and Uganda to gain a deeper understanding of the contextual factors influencing each country's underlying food security issues. Then, in October of 2011, 14 different FSFs traveled to OSU for professional development training. In the final phase, OSU representatives conducted follow-up site visits with many of the FSFs to examine the project's outcomes. Embedded within each phase were cross-cultural learning opportunities in which FSFs and students engaged in discussions and activities to gain improved understandings of one another's countries and cultures.

During phase two and phase four of the project, OSU students traveling to Uganda also had the opportunity partake in ISL experiences by conducting educational seminars aimed at recruiting and retaining Ugandan youth in agriculture as well as myriad informal interactions with FSFs and other Ugandans. For example, participants described their personal experiences as 4-H club members and students in secondary agricultural education, including the FFA, and how that influenced their pursuing career preparation for the agricultural industry. This study examined the *lived experiences* of six students who participated in such activities.

Reflexivity

To position ourselves in this study, we developed the reflexivity section as a way to own our voice and perspective (Tracy, 2010). We believe a *credible voice* conveys both *authenticity* and *trustworthiness* when describing choices, experiences, and biases influencing the research process (Tracy, 2010). Perhaps the most critical and potentially damaging issue to address was our refusal to accept the idea that data can be collected and analyzed *objectively*. In fact, we agree with Patton's (2002) position that "to claim the mantle of

'objectivity' in the postmodern age is to expose oneself as embarrassingly naïve" (p. 50). Instead, we recognize our subjective biases might have influenced and shaped various elements of this study. Therefore, we developed the disclosure below to illuminate relevant experiences that might have influenced our decision-making throughout this investigation.

> *Both researchers have experience as school-based, agricultural education (SBAE) teachers in their respective home states. Therefore, we have received extensive pedagogical training and developed biases regarding how we perceive students acquire knowledge. The lead researcher is currently pursuing a doctoral degree at Oklahoma State University, and his advisor, the other author of this study, mentored him throughout each phase of this investigation. At the time of data collection, the lead researcher had not traveled abroad. Since that time, however, he has visited both Asia and Europe. On the other hand, his advisor has a plethora of international experiences and a research focus involving global education and international development in the context of agriculture.*

We approached the study with these experiences supporting our worldviews. Although we attempted to bracket these views (Moustakas, 1994), we recognize our prejudices may have influenced many aspects of the investigation. Mindful of this, we offer an explanation of the methods employed to clarify our methodological maneuverings, quandaries, and discoveries as we sought to answer the study's research question using Moustakas' (1994) phenomenological model.

Methodology

Before applying the phenomenological model, we will explain the method's key features to bring our interpretations into clearer focus. The phenomenological approach promotes a way for researchers to construct social reality similar to other qualitative methodologies (Moustakas, 1994). Moreover, Moustakas (1994) argued researchers could best represent social reality by following four key analytic steps: (a) *epoché*, (b) phenomenological reduction, (c) imaginative variation, and (d) a synthesis of composite textual and structural descriptions.

Imbuing Quality and Ethical Practices into the Study

To ensure we achieved rigor and trustworthiness, Tracy's (2010) eight quality standards – worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethical, and meaningful coherence – for qualitative research were built into the study's design. By nesting the current investigation in Moustakas' (1994) phenomenological model and Tracy's (2010) suggestions for qualitative quality, we positioned ourselves from a vantage point that allowed us to acquire a rich, nuanced view of the *essence* of participants' shared experiences (Moustakas, 1994). To convey our use of both techniques, the methods section highlights the important features of each. For instance, in an intentional nod to Tracy (2010), we selected to study a phenomenon *worthy* of investigation because it was relevant for university faculty seeking to enrich their students' global awareness and knowledge. From this study's inception, we also stressed *ethical* practices by securing Institutional Review Board (IRB) approval and emphasized ethical

decision-making in each phase (Tracy, 2010).

Procedures

After receiving IRB approval, we used a purposeful sampling technique (Patton, 2002) to select six OSU agriculture students who participated in an ISL experience to Uganda during 2011 or 2012. The students included three males and three females and evenly divided as undergraduate and graduate students.

Data Sources and Data Collection

We stressed *rich rigor* by placing emphasis on appropriate selection of individuals for the study's sample (Tracy, 2010). We also devoted sufficient time to collecting and analyzing the study's data (Tracy, 2010). This process began by using the research question to develop an interview protocol to gain a richer understanding of the participants' lived experiences. Next, we turned to Moustakas' (1994) phenomenological model. The first stage, *epoche,* required we approach participant interviews in an unbiased and open way. To promote *sincerity* (Tracy, 2010), we chose a self-reflexive technique called *bracketing* that allowed us to mitigate our prejudices (Moustakas, 1994). Through this process, it was imperative to refrain from letting our experiences and biases influence us during the collection and analysis of data. Thereafter, the lead researcher conducted 60-minute long, semi-structured interviews during the Spring of 2014. We offered participants one of two interview formats: (a) face-to-face or (b) using the Skype® video conferencing tool. We recorded participants' interviews using an iPhone® application and downloaded the audio to a password-protected computer. Next, the interviews were transcribed verbatim. To achieve *credibility,*

participants' blogs, photos, and other relevant documents furnished additional data points to assist in triangulating the study's findings (Tracy, 2010).

Data Analysis

After immersing ourselves in data collection, we entered a period of incubation (Patton, 2002). Because this study drew on participants' collective memories, we used this time to work through their *lived experiences* (Linde, 2009). For example, the data corpus was analyzed holistically by reading each transcript and returning to audio recordings to listen for instances when participants chose stories to share their experiences. The closeness gained through this process allowed us to achieve *resonance* (Tracy, 2010) by developing initial naturalistic generalizations before subjecting the data to *phenomenological reduction* (Moustakas, 1994). To initiate the phenomenological reduction phase, we returned to the data corpus to identify *significant statements* (Moustakas, 1994). Through this process, we identified 334 significant statements and assigned each a horizonal code. Subsequently, we clustered similar and overlapping codes and reduced them to 79 *delimited horizons* (Moustakas, 1994). We then organized the delimited horizons into a *composite textural description* as a way to interweave participants' lifeworlds, conscious experiences, and the phenomenon (Moustakas, 1994). Construction of the textural description provided a crucial layer of depth to our analysis by helping us understand *what* participants experienced collectively during their ISL experiences in Uganda (Moustakas, 1994). With this understanding, we gained insight into the *significant contributions* this study held for research, theory, and practice (Tracy, 2010).

Representing the data in this form brought forth interesting advancements in layering participants' meanings, however, it also left us in a quandary. For example, by mobilizing the composite textural description, we noted several interesting connections between the data collected and the ISL literature – an indication we were approaching *meaningful coherence* (Tracy, 2010). However, we also found incongruences suggesting a deeper analysis of the data was needed. To achieve that, we initiated Moustakas' (1994) *imaginative variation* technique. We pursued meaning by using "imagination, varying frames of reference, employing polarities and reversals, and approaching the phenomenon from divergent perspectives" (Moustakas, 1994, p. 97). Therefore, we worked *within and against* a variety of frameworks, sources, and rival explanations. By asking questions of the data, we negotiated through a number of conceptual and theoretical possibilities through which this study *could be* positioned. However, as noted earlier, Kiely's (2005) TLMSL still seemed to most neatly reconcile the *messiness* of Moustakas' (1994) imaginative variation technique. Ultimately, Kiely's (2005) framework helped us to weave together important loose ends such as how participants coped with an *altered sense of self* during and after their travel to Uganda. What emerged from this knitting process was a *composite structural description* of the phenomenon (Moustakas, 1994).

As a result of developing the structural description, we gained confidence in using Kiely's (2005) work as a theoretical anchor to ground the study's findings. However, to further substantiate (Koro-Ljungburg et al., 2009) this notion we returned to the delimited horizons. By allowing Kiely's (2005) theory to drive our analysis, we were able to reduce the 79

delimited horizons to six themes. All themes, except for one, were congruent with TLMSL. In many respects, therefore, our data supported much of the framework's theorized features. However, we also noted it had shortcomings as demonstrated by the emergence of an incongruent theme. We eventually conceptualized this incongruence as an expansion of Kiely's (2005) TLMSL. In a final effort to unveil the phenomenon's essence, we returned to Moustakas' (1994) recommendations and developed a *synthesis of participants' textural and structural descriptions.* The outcome of our synthesis is featured in the findings section.

Findings

The findings emerged by conflating the *textural-structural descriptions* and narrating the outcome through six themes of meaning: (a) contextual border crossing; (b) dissonance; (c) personalizing; (d) processing; (e) connecting; and (f) sustained relationships. A conflation of the six themes forms the phenomenon's essence, i.e., the processes fostering a *transformative shift in university agriculture students' global knowledge and perspectives* (Kiely, 2005; Mezirow, 2000). These processes should not be interpreted as expedient. Instead, we convey the gradual shifts participants underwent as they grappled and came to terms with and eventually made meaning from their ISL experiences. To accomplish this, themes were maneuvered between the *internal* and *external lifeworlds* of participants across time and within their reconstructed realities by drawing on salient examples derived from the data corpus (Moustakas, 1994).

Contextual Border Crossing

The participants brought a host of *personal*, *historical*, *structural*, and *social dynamics* to their ISL experiences (Kiely,

2005). These contextually situated factors seemed to provide scaffolding for how they made sense of their experiences in Uganda and, in turn, also influenced the ways in which the participants' global perspectives shifted after returning home. The contextual border-crossing theme manifested through their thoughts, fears, and concerns before they embarked for Uganda. For example, the participants conveyed a brew of doubts, anxieties, and other emotions. Mark, a doctoral student during his ISL experience, explained his thoughts in the days and hours before traveling to Uganda.

> I just felt haunted with doubt. I thought to myself, 'How am I ever going to be able to make an impact on food insecurity in my lifetime? Are they [, i.e., Ugandans,] even wanting to get where I think they need to be?' I just had a lot of doubts running through my mind before I even stepped off the plane.

Participants also crossed contextual borders by recognizing how *lenses of privilege* permeated, and, at times, even distorted their frames of reference (Kiely, 2005). As a result, they began to recognize how growing up in a developed country, such as the United States, influenced them to take many personal privileges and liberties for granted. Ryan explained:

> Americans, myself included, have to have the biggest, nicest computers. Ugandans on the other hand, have very little technology. But they do a lot of great things with what they do have. I think about this often. As an American, I often take for granted how good I have it because of the technology I possess.

At its core, this theme provided insight into the range of contextual factors that framed participants' lived experiences in Uganda. Context appeared to shape the entire transformational learning process for the study's participants (Kiely, 2005).

Dissonance

After stepping on Ugandan soil, students explained how they began to experience a range of emotions. Fueled by inconsistencies between their contextually situated frames of reference and exposure to a conflicting reality, they described their initial reaction as an *emotional rollercoaster*. Jane expanded: "It just hits you that I'm on a continent where people are persistently poor and hungry. It all starts rushing towards you. Honestly, it was a little scary." Kiely (2005) described feelings of discomfort and anxiety in ISL, such as those voiced by Jane, as forms of *low-intensity dissonance*. In this study, however, participants also identified sources of *high-intensity dissonance*, i.e., events perceived as particularly "shocking or overwhelming" (Kiely, 2005, p. 11). During a trip to a national referral hospital, children's rehabilitation unit, Sarah experienced high-intensity dissonance after seeing a malnourished baby who "had flies crawling out of its mouth." She noted this image became etched in her mind throughout the remainder of her experience in Uganda. To this point, Kiely (2005) asserted that dissonance is key to initiating transformational learning, and, if facilitated appropriately, high-intensity dissonance can trigger deeper perspective transformations.

Personalizing

Although dissonance deeply affected the participants, they soon learned to cope and move past these emotions through the *personalizing* stage (Kiely, 2005). Personalizing involves a critical analysis of the self (Kiely, 2005). For most participants, this catalytic event helped them to examine their place in the world and begin to assess

prior assumptions. Andrew, for example, explained how dissonance fostered a deeper sense of empathy, which helped him see the project's mission in a new light. He explained:

> The shock [after arriving] puts it into perspective for you. Because if you don't have that shock, or you have that ah-ha moment, I don't think that you would grasp the full concept of the project or the full concept of working in a developing nation period. You start to see through the lens of somebody else and that puts it all into perspective for you.

Jane, an undergraduate student, also emphasized the importance of coming to terms with her dissonance. For example, during the mission, she blogged about feeling upset regarding the living conditions some Ugandans endured. We asked Jane to provide more insight into these emotions during her interview. Through this approach, we were less concerned with her fact-based recollections; instead, our interest was in how she mobilized these feelings within her internal lifeworld (Linde, 2009). In a powerful moment of reflection, Jane revealed: "Overall thinking about the big picture, these feelings were actually really good for me. It was such a growing experience." As students came to understand the role dissonance played in shaping their lived experiences in Uganda, they identified sources of worry, distress, and fear as precursors to making meaning. However, personalizing did not occur simultaneously across participants; rather, students initiated this phase independently as they learned to navigate their emotional terrains.

Processing

The fourth theme, *processing*, emerged as participants narrated the importance both individual and social reflective practices played in *opening their eyes* to life in a developing country. As Kiely (2005) explained, processing involves "problematizing, questioning, analyzing, and searching for causes and solutions to problems and issues" (p. 8). In this study, five participants kept either formal journals or blogs during their ISL experiences in Uganda. It should be noted this reflection was required or strongly recommended by university faculty members who guided the experience. The intent of such was to allow students to conceptualize the ISL experience by examining the interplay between their visceral experiences and the issues and problems pervading the host country. Sarah, a graduate student, was not fond of reflective writing during her time in Uganda but later recognized its power:

> I do not write for fun, but doing it [, i.e., journaling,] allowed me to make some important connections to the activities and the meaning that I put behind it. At the time, obviously, it was a lot more concrete. Three years later, there are some really specific things that we did and experiences that I remember. As far as the big picture of what I wrote in my journal, I can't necessarily tell you what's in there, but I do think it was important.

To this point, the processing theme has been cast as an orderly, formalized exercise that required students to set aside time to reflect each day. However, this was not always the case. In fact, a surprising discovery in this study was the importance participants placed on conversations and informal interactions with others. Ryan elaborated:

> I learned a lot through conversations. I began to understand that life was more corrupt there [in Uganda]. For example, we talked about being pulled over [by law enforcement

officials] and sliding them a little money and being let go. I'm sure that happens in the U.S., it's just not as open. But I reflected just through talking with other people about this.

This theme addressed the importance participants placed on processing their experiences. By reflecting individually and socially, students began to render meaning from persistent issues and problems in Uganda. Therefore, the construction and negotiation of meaning was ongoing as the participants acknowledged their existing perspectives were incomplete and perhaps even fragmentary.

Connecting

As students witnessed glimpses of everyday life in Uganda, they began to grasp its complexity more fully. Rejecting neat and tidy perspectives of the world, they craved *authentic connections* with individuals. Kiely (2005) explained: "connecting is learning to affectively understand and empathize through relationships" (p. 8). By engaging in relationships with Ugandans, students were able to delve into the complexities of their surroundings more genuinely. These connections also encouraged students to integrate the wisdom offered by their acquaintances into more complex perspectives. As a result, participants developed a conflicted but hopeful view of Uganda's position in the world. For example, Andrew stressed the importance personal relationships played in helping him to see the world differently. In a blog posting he made while traveling from Uganda to the United States, Andrew wrote:

I can't stop thinking about some of the things I have seen. The more I sit here, *the more I reflect on the stories told to me, the hands who showed me how these people survive, and the*

faces of the men, women, and children in Uganda [italics added]. At the moment, I am looking at the map next to my computer of all the towns and villages we stopped in over the course of the past ten days on the soil of the Pearl of Africa. Every location triggers a memory . . . a memory that makes me stop and think about how lucky I am to live in the United States of America and how we (as citizens of the world) must continue to assist our brothers and sisters abroad.

Congruent with Kiely's (2005) TLMSL, Andrew gained a deeper sense of responsibility by connecting with individuals in Uganda. The participants conveyed that building authentic relationships with Ugandans catalyzed shifts in their global perspectives. And, as a result, they began to integrate a new sense of purpose into their daily lives, i.e., transformation had occurred.

Sustained Relationships

The final theme features a concept not explored in Kiely's (2005) TLMSL. In the initial findings, the theory helped explain the transformational learning processes students underwent while in Uganda (Kiely, 2005). The participants, however, also articulated how their views continued to be transformed after returning home. In this regard, transformational learning was not isolated to an international context. Instead, participants' perspectives continued to shift by *sustaining relationships* with Ugandans after returning to the United States. Often, the students sustained contact through social media, electronic mail, or other forms of Internet-based technology. By using these platforms, they continued to observe Ugandans' lives through comments, pictures, and other shared perspectives. This

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information also helped the students more deeply understand the issues and problems affecting developing countries. Mary explained:

> I now have a personal investment. For example, when I used to see a Tweet about Uganda, I would have been like, 'Oh, interesting.' Now I get on Facebook or email my Ugandan friends and say, 'Is everything okay there? What's going on?' I have such a deeper connection. If I had just learned about it instead of visiting Uganda, it wouldn't have been as important; those relationships are what have been crucial.

The final theme, sustained relationships, offered an expansion of Kiely's (2005) TLMSL. This highlighted the importance of students forming deep connections with individuals during their ISL experiences and maintaining contact afterward through social media and electronic mail. Through these ongoing relationships and by communicating, students seemed to continuously challenge and refine their global perspectives even after they returned home.

Conclusions

The purpose of this study was to explore the lived experiences of university agriculture students who participated in an ISL experience in Uganda. The essence of participants' lived experiences is best described as a *transformative shift in students' global knowledge and perspectives.* The processes that foregrounded this shift were described through six themes of meaning: (a) contextual border crossing; (b) dissonance; (c) personalizing; (d) processing; (e) connecting; and (f) sustained relationships. The findings suggest university students'

global perspectives *could be* modified through ISL experiences. Further, students' cross-cultural *knowledge* and *understandings* became more complex. These findings are encouraging as universities seek to enhance students' cultural awareness and global knowledge (Moriba & Edwards, 2015; Moriba, Edwards, Robinson, Cartmell II, & Henneberry, 2012).

Next, we provide conclusions for each process that led to students' perspective transformations (Mezirow, 2000). The first theme, *contextual border crossing,* suggests that contextual factors seemed to shape the transformative learning process (Kiely, 2005). This finding aligns with TLMSL and is also consistent with the current agricultural education and extension literature (Black et al., 2013) regarding the importance of contextual factors in students' ISL experiences (Kiely, 2005). We, therefore, conclude that understanding the idiosyncratic differences each student brings to an ISL experience is crucial to interpreting how the transformational learning process unfolds for a given individual. Dissonance also played a key role in the perspective shifts of participants. Webster and Hoover (2006) emphasized the role of dissonance in service-learning and explained dissonance may facilitate students moving out of their comfort zones. However, in this study, students experienced both low and high intensity dissonance.

As students learned to cope with dissonance, they entered the personalizing stage and underwent a critical analysis of their existing perspectives on global issues. We conclude that, while navigating this stage, the participants began to recognize how the dissonance helped them to shift their existing perspectives toward more sophisticated views of the world. Although personalizing is an essential feature of

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Kiely's (2005) TLMSL, the literature on agricultural and extension education is scant in this regard.

The processing phase appeared to play a role in helping students traverse the meaning of their experiences and reflect on such in real time. This finding aligns with some of the empirical evidence presented by other researchers (Black et al., 2013; Klein & Lawver, 2007). In this study, five participants processed their experiences by blogging or journaling daily. We conclude these strategies allowed them to more deeply assess prior predispositions and make sense of how their perspectives were altered. Blogging also seemed to provide participants an emotional release by sharing their experiences with friends, family, and acquaintances.

Some literature indicates the importance of students developing strong relationships with individuals in the countries they experience (Black et al., 2013; Klein & Lawver, 2007). However, unique to this study, participants articulated how they used their relationships as anchors for integrating understandings of new perspectives after the ISL experience ended. Therefore, we conclude that *connecting* with Ugandans helped the study's participants empathize with the hosts' struggles while making sense of their own experiences. The final theme, sustaining relationships, is not addressed by Kiely's (2005) theory or other literature uncovered by the researchers. This finding illuminated the importance participants placed on maintaining relationships with Ugandans through social media, electronic mail, and other forms of communication. We conclude that maintaining these relationships allowed students to continue to glean valuable insights about life in a developing country after they returned home and, perhaps,

manifested more radical perspective transformations over time (Mezirow, 2000).

Implications, Recommendations, and Discussion

Recognizing U.S. agricultural universities desire to enhance students' international awareness and global competence (Irani, Place, & Friedel, 2006; Moriba & Edwards, 2013, 2015; Moriba et al., 2012), the study's findings hold a number of interesting possibilities for additional research, theory-building, and praxis. A key finding in this investigation was the role contextual factors played in shaping participants' ISL experiences. Future studies should seek to identify which contextual factors most profoundly influence students' perspective shifts and why. Another potentially generative finding of this study was the role of dissonance. Similar to Kiely's (2005) findings, participants articulated both low and high intensity dissonance. We, therefore, recommend examining whether exposing students to high intensity dissonance during ISL experiences increases the likelihood of more powerful perspective transformations (Mezirow, 2000).

Our findings also suggest participants learned to move beyond their initial feelings of discomfort through the personalizing stage (Kiely, 2005). In the future, we suggest researchers examine the coping mechanisms students use to come to terms with their dissonance. Participants also voiced the importance processing, or reflection, played in helping them to make meaning (Black et al., 2013). We recommend exploring various reflection techniques to determine which may hold the most promise for ISL. Because the *sustained relationships* theme emerged, we also recommend further exploration on how continuing relationships through social

media and other information technologies may contribute to the transformation of students' international perspectives, especially in regard to improving their global competence.

In this investigation, Kiely's (2005) TLMSL was used to interpret the study's findings. The theory offered a valuable lens for understanding the *processes* underlying students' perspective transformations. However, despite its advantages, some weaknesses of the theory were revealed. For example, the sustained relationships theme was not supported by Kiely (2005). Perhaps the reason underlying this incongruence is because the theory was introduced before the explosive rise of social media and more widespread access to the Internet? Therefore, we recommend future research explore whether Kiely's (2005) theory should be expanded given new technological advancements that facilitate ongoing personal, reciprocal communication.

ISL is an intense undertaking "that is more arduous, time-consuming, and pedagogically complex than most curricular methods" (Kahn, 2011, p. 113). However, findings from this study suggest important implications for practice. First, we recommend practitioners take time to understand the contextual factors influencing their students' ISL experiences. For instance, educators should learn about their students' backgrounds before embarking on an ISL experience. It is also important to be aware of the role of dissonance. We recommend educators have a plan to guide their students through the initial emotional shocks they are likely to experience. By preparing for this phase, students may reach a level of understanding that allows them to more deeply interpret the issues and challenges facing their host countries.

Consistent with other researchers (Black et al., 2013; Klein & Lawver, 2007), reflection played a key role in helping students process their experiences. To that, we recommend practitioners stress reflective strategies when teaching through ISL. Because our findings revealed the importance of relationships, we also recommend educators promote connections likely to enhance students' global awareness, which remains a primary learning objective for many U.S. universities (Knight & DeWit, 1995; Moriba & Edwards, 2013, 2015; Moriba et al., 2012; Navarro & Edwards, 2008). Finally, we suggest practitioners design ISL experiences calibrated to shift students' global perspectives in positive, transformative, and far-reaching ways.

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